

1006496-120504

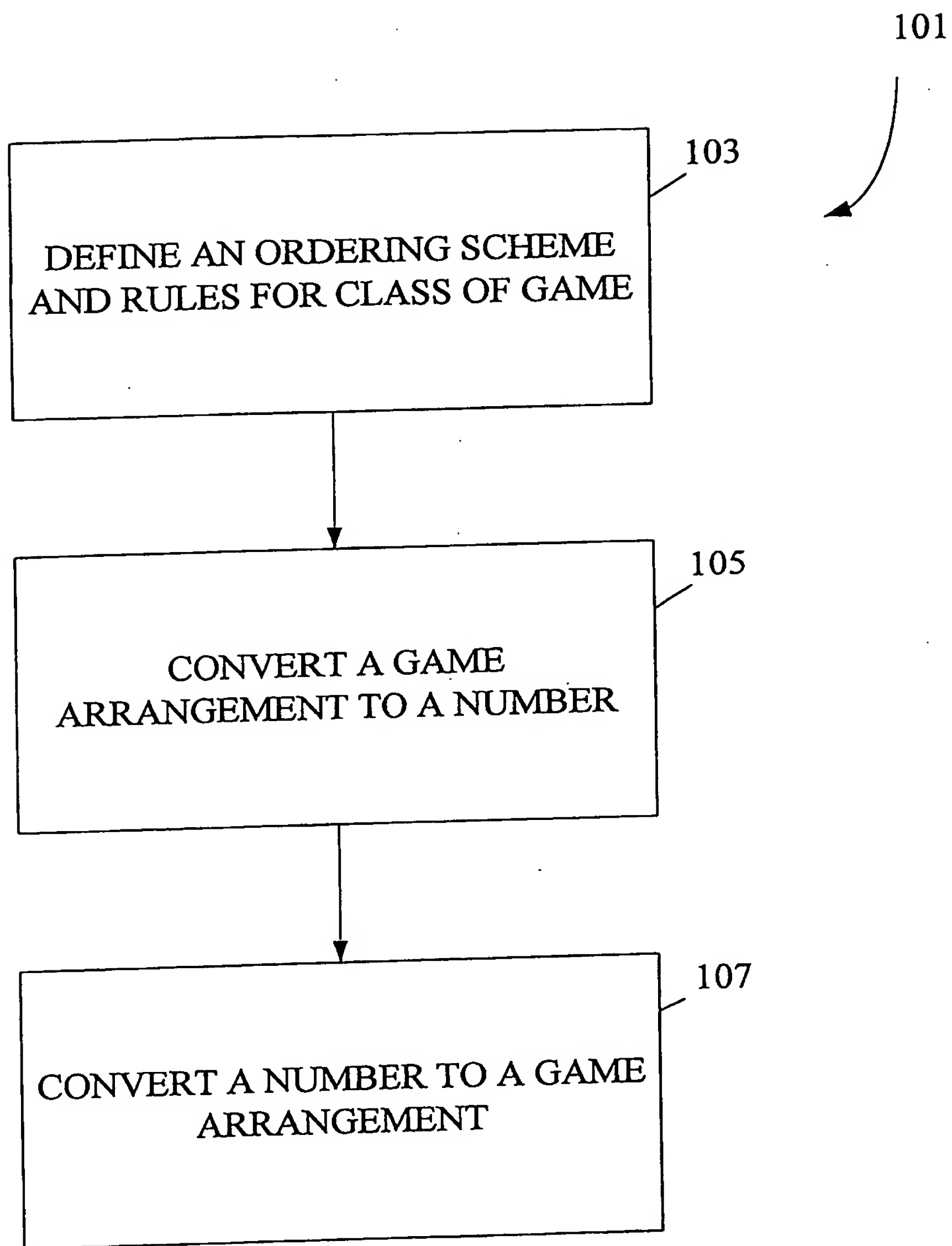


Figure 1

1006496-120501

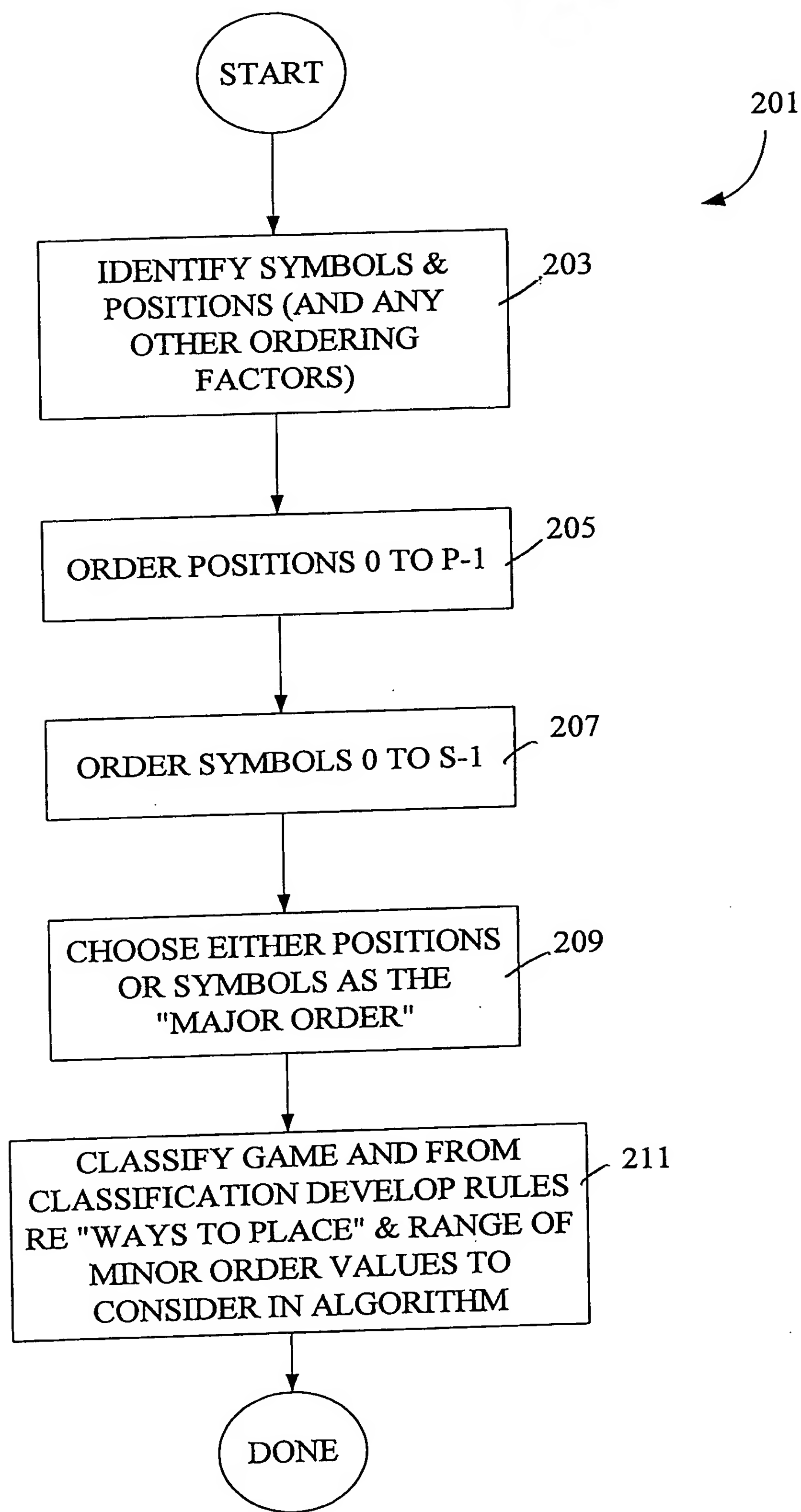


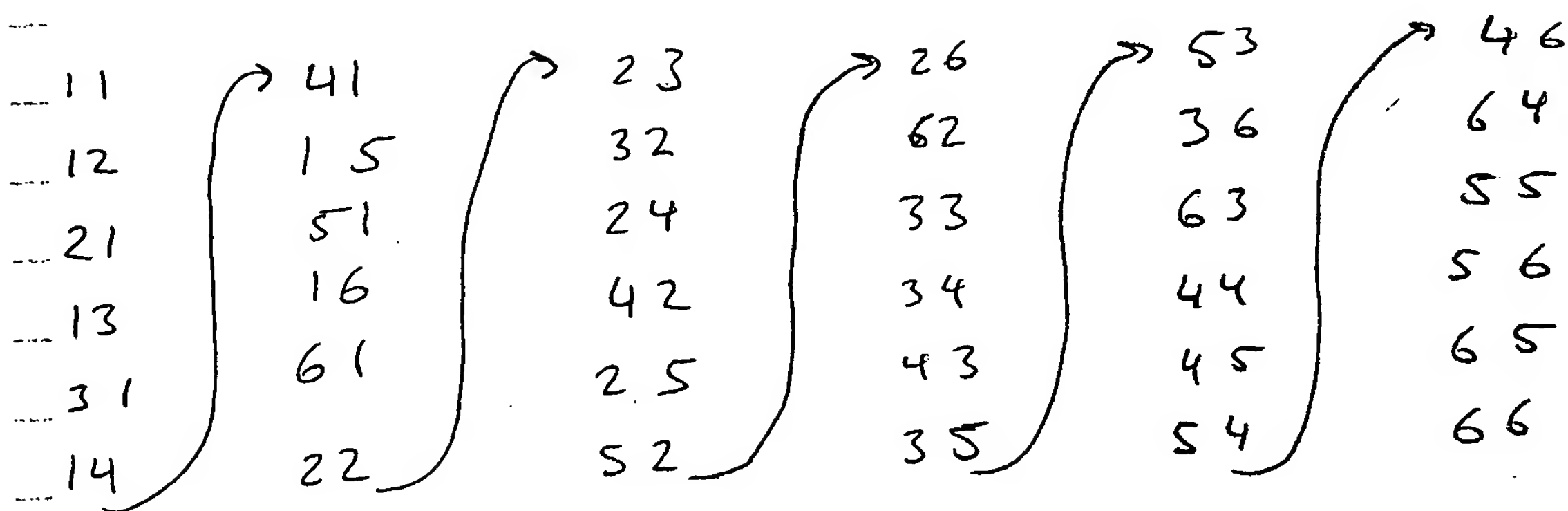
Figure 2

10006496-120501

2h	3h	4h	5h	6h
2h	3h	4h	5h	7h
2h	3h	4h	5h	8h
		.		
		.		
		.		
2h	3h	4h	5h	Ah
2h	3h	4h	6h	7h
2h	3h	4h	6h	8h
		.		
		.		
		.		
3h	4h	5h	6h	7h
3h	4h	5h	6h	8h
		.		
		.		
		.		
9s	10s	Js	Qs	Ks
9s	10s	Js	Qs	As
		.		
		.		
		.		
10s	Js	Qs	Ks	As

Figure 3

Symbols as Major Order (Two Dice)



Position as Major Order (Two Dice)

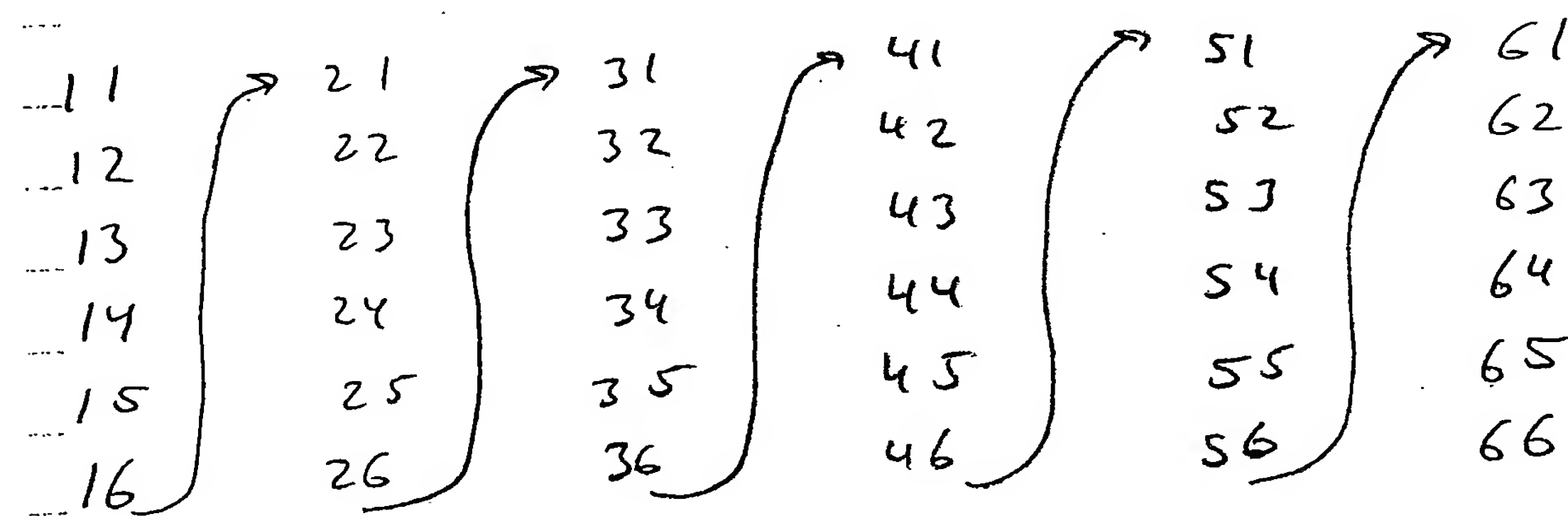


Figure 4

34 KH 2D 7C S

2H	3H	4H	5H	6H
2H	3H	4H	5H	7H
2H	10S	JS	QS	KS
2H	JS	QS	KS	AS
3H	4H	5H	6H	7H
3H	4H	5H	6H	8H

ways to place
3H 4H...

34	44	JS	QS	KS
34	44	QS	KS	AS
34	54	64	74	84
34	54	64	74	94

Number skipped
over at
position $P=1$

34	Q4	JS	QS	KS
34	Q4	QS	KS	AS
34	K4	A4	2D	3D
34	K4	A4	2D	4D

IOS JS	QS	KS	AS
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Figure 5

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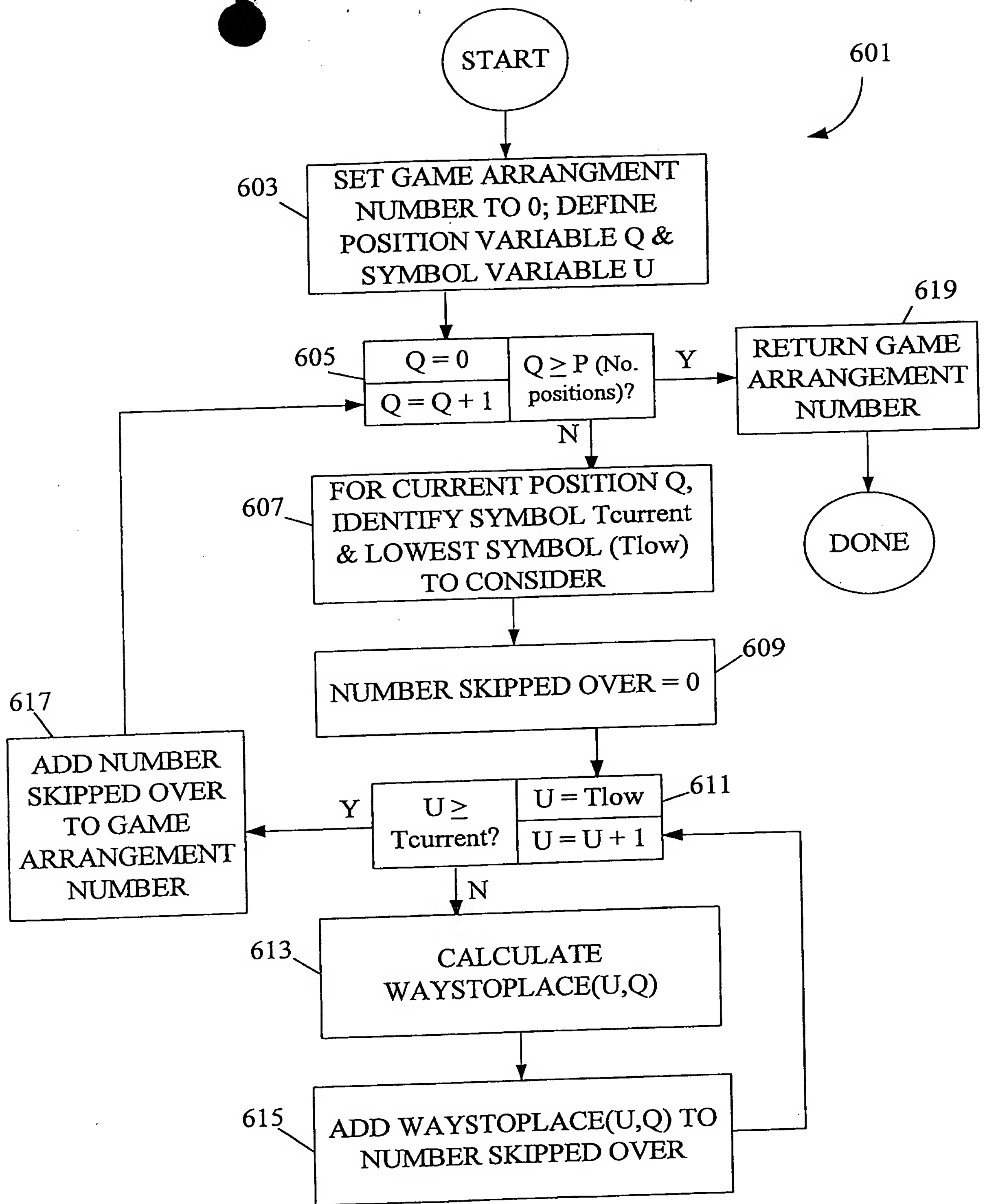


Figure 6

Convert KH, 7C, 4S, 8D, 3H to a number

order the cards! \rightarrow 3H, KH, 8D, 7C, 4S

start w/ $\# = 0$

position $Q = 0$

symbol $T = 1$ (3H) 3H ---

$U = 0$ (2H)

compute # of ways to have 2H --- (draw $\binom{52-0-1}{5-0-1}$)
 $= 249,900$

$\# = 0 + 249,900 = 249,900$

position $Q = 1$, symbol $T = 1$ (KH) 3H KH ---
current throw = 4H

$U = 2$ (4H)

compute # of ways to place 3H 4H ---
 $= 18,424$

$\# = 249,900 + 18,424 = 268,324$

$U = 3$ (5H)

compute ways to place (3H 5H ---) = 17,296

$\# = 268,324 + 17,296 = 285,620$

$U = 4$ (6H)

compute ways to place (3H 6H ---) = 16,215

~~#~~ $\# = \# + 16,215 = 301,835$

$U = 5$ (7H)

compute ways to place (3H 7H ---) = 15,180

$\# = \# + 15,180 = 317,015$

$U = 6$ (8H)

compute ways to place (3H 8H ---) = 14,190

$\# = \# + 14,190 = 331,205$

$U = 7$ (9H)

compute ways to place (3H 9H ---) = 13,244

$\# = \# + 13,244 = 344,449$

$U = 8$ (10H)

compute ways to place (3H 10H ---) = 12,341

$\# = \# + 12,341 = 356,790$

Figure 7 over \rightarrow

$$U=9 \text{ (JH)}$$

$$\text{compute ways to place (3H 5H ---)} = 11,480$$

$$\# = \# + 11,480 = 368,270$$

$$U=10 \text{ (QH)}$$

$$\text{compute ways to place (3H QH ---)} = 10,660$$

$$\# = \# + 10,660 = 378,930$$

$U=11 \text{ (KH)}$ This is over symbol T, being
considered. Stop the B.Z. loop &

go to the next position.

Position Q=2, symbol T=19 (80)

by placing this card

#s skipped over by 3H ^{by placing this card} (2H ---)

= ways to place (2H ---)

skipped over by 3H KH ---

= ways to place (3H 4H ---)

+ ways to place (3H 5H ---)

+ (3H 6H ---)

+ (3H 7H ---)

+ (3H 8H ---)

+ (3H 9H ---)

+ (3H 10H ---)

+ (3H QH ---)

skipped over by (3H KH 8D ---)

= ways to place (3H KH AH ---)

+ " 3H KH 2D

+ " 3H KH 7D

+ " 3H KH 4D

+ " 7D

Figure 7
(continued)

	Position Dependent	Position Independent
with Replacement	$\exp(x, y)$ $0 \leq u < T_{curr}$ $T_{low} = 0$	$C(x, y)$ $T_{prev} \leq u < T_{curr}$ $T_{low} = T_{prev}$
without Replacement	$P(x, y)$ $0 \leq u < T_{curr}$ (excluding previously used values) $T_{low} = 0$	$C(x, y)$ $T_{prev} < u < T_{curr}$ $T_{low} = T_{prev} + 1$

Figure 8

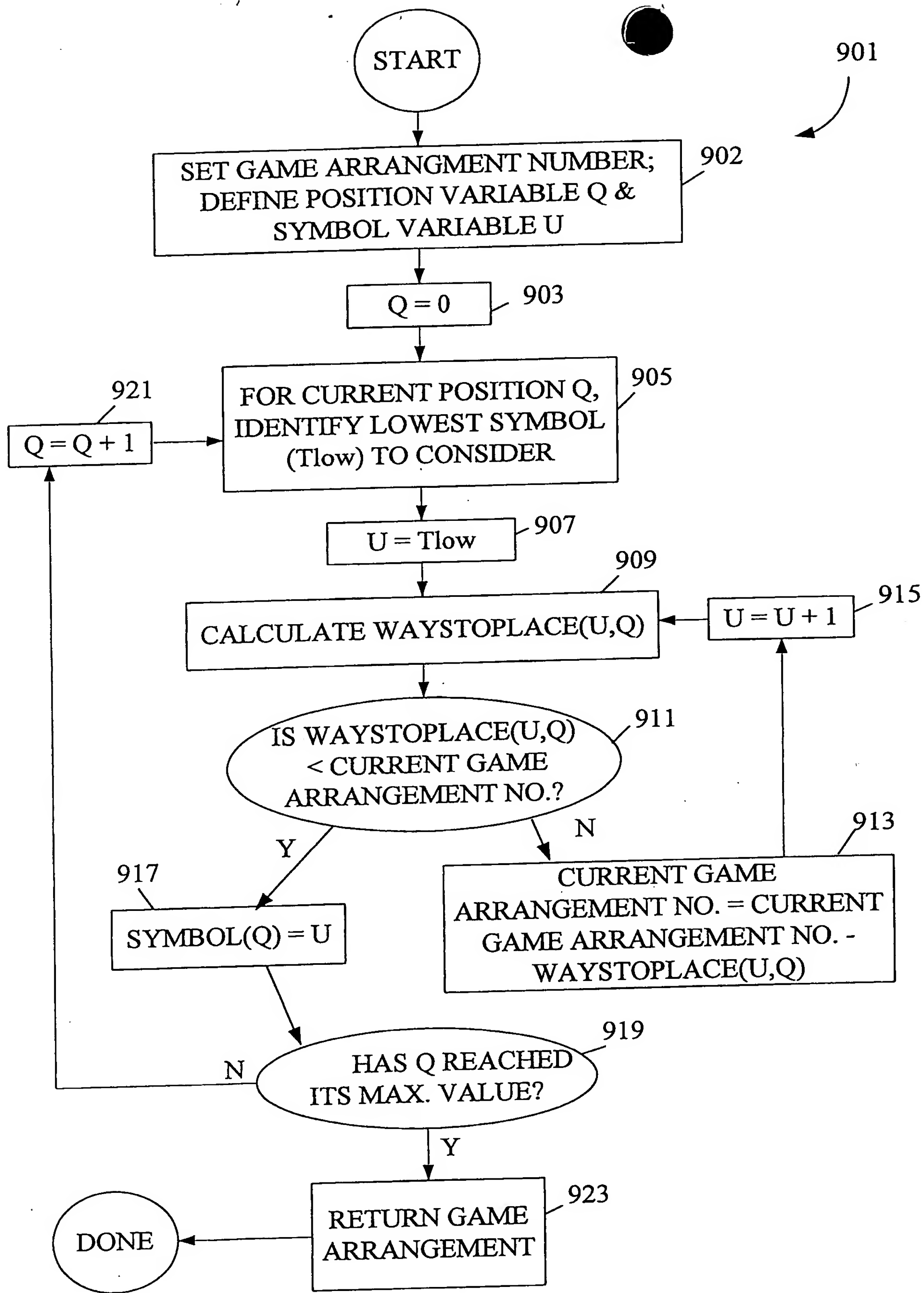


Figure 9

10006496-120501

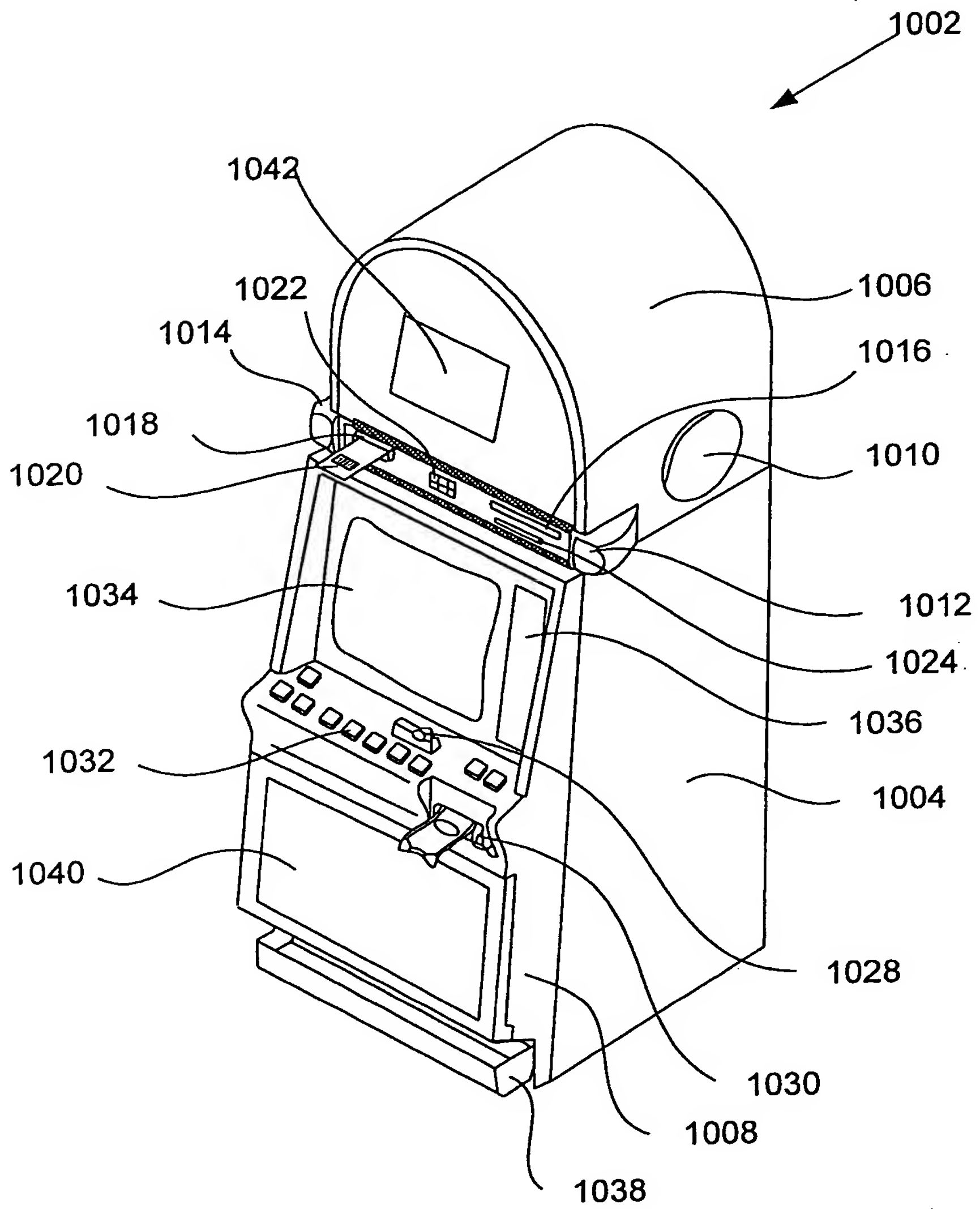


Figure 10

Figure 11

